

# Cybersecurity with Ubuntu

Ubuntu improves your IT productivity and enables your cybersecurity strategy, all while keeping your budget under control

Keeping an organization safe and implementing a robust cybersecurity framework is a task beyond the scope of one particular software or solution. Enterprises need a reliable operating system to power the organization's workloads on the public or private cloud, while enabling their cybersecurity strategy and industry sector or national requirements at the same time.

With Ubuntu Advantage, the enterprise-grade subscription for Ubuntu, customers leverage an operating system designed with today's security landscape in mind. Canonical collaborates with security organizations to gain access to vulnerabilities before they are public, ensuring that Ubuntu is as secure as it can possibly be. Ubuntu Advantage customers can rely upon a trusted partner of the open source community that enables open source applications for high security and regulated environments, such as FIPS 140 and Common Criteria. Ubuntu Advantage sets the foundation for a cybersecurity framework, with provenance, vulnerability management, hardening and compliance profiles such as CIS and DISA-STIG, while offering competitive economics.

## Key benefits

### Predictable lifecycle

Ubuntu LTS releases are made available every two years and are maintained for ten years with Ubuntu Advantage. Each release comes in two five-year phases, Standard support and Extended Security Maintenance. Both include security updates and kernel livepatching.

Ubuntu LTS release										
Phase	Standard Support					Extended Security Maintenance				
Features	Maintenance updates					Security updates				
	Security updates									
	Livepatching					Livepatching				
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	
<div>Available with subscription</div> <div>Available without subscription</div>										

### Certified Compliance

Regulated and high security environments have complex requirements, as they are designed to tackle many threats, known and unknown. Therefore, developing or running workloads in these environments requires rigid certifications. Ubuntu Advantage provides access to the necessary artifacts to comply with [Common Criteria](#), an international (ISO/IEC 15408) computer security certification for high security environments, and [FIPS 140](#), the U.S. government data protection profile.

### Secure configuration & hardening

The default configuration of Ubuntu balances usability and security. However, systems carrying dedicated workloads can be further hardened to reduce their attack surface. Canonical works with DISA to ensure the [Security Technical Implementation Guides \(STIG\)](#) are available for Ubuntu, and Ubuntu Advantage customers get access to [certified CIS benchmark](#) content to access the widely accepted hardening guide using the OpenSCAP tools.

## Vulnerability Management

System administrators are constantly being challenged from attackers looking to exploit software vulnerabilities. Defending infrastructure requires timely access to software security updates (including [kernel livepatching](#)), security advisories, and machine readable [OVAL vulnerability data](#) for SIEM integration and automation for the lifecycle of all relevant systems. [Extended Security Maintenance \(ESM\)](#) ensures that every one of these necessities are provided for Ubuntu's 10-year lifecycle. Canonical ensures timely fixes for operating system vulnerabilities, and targets a response time of up to 1 day on average for critical and up to 14 days on average for high severity vulnerabilities. Furthermore, as each environment is impacted by a vulnerability differently, Canonical's Standard and Advanced Support offer enables a quick feedback path for vulnerabilities not classified as high or critical but disproportionately impact the organization's applications.

## Anti-exploitation defenses

Malicious software (malware) is the primary threat to organisations today, and can have a severe impact on operations. Using malware, attackers might be able to capture passwords, steal or even destroy sensitive corporate data. Ubuntu comes with state-of-the-art anti-exploitation malware defenses. It enables the latest industry best practices against vulnerability exploitation vectors, such as heap and stack protections, Address Space Layout Randomization (ASLR), and non-executable memory. Ubuntu applications are compiled to take advantage of the latest CPU security features such as Intel's Control-flow Enforcement Technology (CET). Ubuntu systems support UEFI secure boot, and receive automatic security updates by default.

## How does Ubuntu Advantage compare to RHEL and SLES?

While all companies distribute an operating system based on Linux, the technical implementations are very different. Ubuntu is based on the community-led Debian operating system, deriving conventions from it, while RHEL derives from Fedora (community based but led by Red Hat) and SuSe from OpenSuSe. The commercial terms are also very different, with Ubuntu Advantage enabling organizations to put an end to complex to implement per socket pricing policies and take advantage of a simple per host and per VM pricing policy<sup>1</sup>.

Operating system	Physical Server			Cloud / VMs		
	Pricing model	Yearly price		Pricing model	Yearly price	
		Host w/ 1 CPU socket	Host w/ 4 CPU sockets		1 VM	60 VMs
Red Hat Enterprise Linux w/ Standard Support	Per CPU socket	\$799	\$1598	Per VM-pair	\$799	\$23970
SuSe w/ Standard Support & Livepatching	Per CPU socket	\$2150	\$4300	Per VM-pair	\$2150	\$64500
<b>Ubuntu Advantage w/ Standard Support</b>	<b>Per host</b>	<b>\$750</b>	<b>\$750</b>	<b>Per VM</b>	<b>\$250</b>	<b>\$15000</b>

## Get started with Ubuntu

To purchase Ubuntu Advantage, including cybersecurity offerings, please visit [ubuntu.com/advantage](https://ubuntu.com/advantage) or contact our team below.

(UK) +44 203 656 5291  
(US) +1 737 2040291  
email: [sales@canonical.com](mailto:sales@canonical.com)

<sup>1</sup> A subscription that covers your estate of Ubuntu physical systems allows for unlimited hosted VMs in the same estate.